

UF-326XC1

SEQUENCE LISTING

1

<110>	Guy, Charles L. Kaplan, Fatma	
	Sung, Dong Yul	,
<120>	Materials and Methods for Providing Plants with Increased Resistance to Environmental Stress	
<130>	UF-326XC1	
<140>	10/602,395	
	2003-06-23	
<150>	US 60/390,384	
<151>	2002-06-21	
<160>	32	
<170>	PatentIn version 3.2	
<210>	1	
<211>	18	
<212>	DNA	
<213>	Artificial sequence	
<220>	alianouslantida papaniman	
<223>	oligonucleotide PCR primer	
<400>	1	
	gaga atacaatg	18
<i>,</i>		
<210>		
<211>		
<212>		
<213>	Artificial sequence	
<220>		
	oligonucleotide PCR primer	
<400>	2	
caacgg	caca atctcatg	18
010		
<210>	3	
<211><212>	16 DNA	
	Artificial sequence	
~2137	in officer poducino	
<220>		
<223>	oligonucleotide PCR primer	
<400>	3	
gacacc	cagt tcaaaa	16

```
<210> 4
<211> 18
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide PCR primer
<400> 4
ctcaacttct tcccgaca
                                                                      18
<210> 5
<211> 18
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide PCR primer
<400> 5
ggaacaagcg gacctcat
                                                                      18
<210> 6
<211> 18
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide PCR primer
<400> 6
tctcagcgat cttgcctt
                                                                     18
<210> 7
<211> 18
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide PCR primer
<400> 7
gctggcaggc gtaacact
                                                                     18
<210> 8
<211> 21
<212> DNA
<213> Artificial sequence
```

<220>		
<223>	oligonucleotide PCR primer	
<400>	8	
	gagg agttgtagaa g	21
033000	5u55 u5005cu5uu 5	21
<210>		
<211>		
<212>		
<213>	Artificial sequence	
<220>		
	oligonucleotide PCR primer	
<400>	9	
cgtctt	gaac cacacagc	18
.010	10	
<210> <211>		
<212>		
	Artificial sequence	
	•	
<220>		
<223>	oligonucleotide PCR primer	
400		
<400>	10 tete ceteetet	18
gcaaag		16
<210>	11	
<211>	18	
<212>		
<213>	Artificial sequence	
<220>		
	oligonucleotide PCR primer	
\2257	origonacicociae rek primer	
<400>	11	
ccaggg	taga ggaaacaa	18
<210> <211>	12 18	
<211>		
<213>	Artificial sequence	
- -		
<220>		
<223>	oligonucleotide PCR primer	
<400>	12	10
tcgaagaaga ccgctggt 18		

<210>	13	
<211>	19	
<212>	DNA	
<213>	Artificial sequence	
<220>		
<223>	oligonucleotide PCR primer	
<400>	13	
aagatga	aagg aaatgagtg	19
<210>	14	
<211>	18	
<212>	DNA	
	Artificial sequence	
<220>		
	oligonucleotide PCR primer	
72237	origonacioscias rek primer	
<400>	14	
	ttct ggtctcgg	18
Cacce	2500 3300033	10
<210>	15	
<211>		
<212>		
<213>	Artificial sequence	
<220>	alimental popular	
<223>	oligonucleotide PCR primer	
<400>	15	
ggacca	aggg caagtaag	18
<210>		
<211>	18	
	DNA	
<213>	Artificial sequence	
<220>		
<223>	oligonucleotide PCR primer	
<400>	16	
agccca	tcct cctctgtg	18
<210>	17	
<211>	20	
<212>	DNA	
	Artificial sequence	
	-	
<220>		
	oligonucleotide PCR primer	

```
<400> 17
 aatgacaata tctgagactc
                                                                       20
 <210> 18
 <211> 18
 <212> DNA
 <213> Artificial sequence
 <220>
 <223> oligonucleotide PCR primer
 <400> 18
 accacattct ttagcctc
                                                                       18
. <210> 19
 <211> 19
 <212> DNA
 <213> Artificial sequence
 <220>
 <223> oligonucleotide PCR primer
 <400> 19
 ctttgactct gttctcggt
                                                                       19
 <210> 20
 <211> 18
 <212> DNA
 <213> Artificial sequence
 <220>
<223> oligonucleotide PCR primer
<400> 20
gttgtcagtt tctccgcc
                                                                       18
<210> 21
<211> 20
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide PCR primer
<400> 21
tcaagcggat aagagtcact
                                                                      20
<210> 22
<211> 18
```

÷

```
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide PCR primer
<400> 22
ctcgtccggg ttaatgct
                                                                     18
<210> 23
<211> 18
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide PCR primer
<400> 23
ggagcgattt gtctggtt
                                                                     18
<210> 24
<211> 18
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide PCR primer
<400> 24
tgatgactcg cgcttact
                                                                     18
<210> 25
<211> 18
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide PCR primer
<400> 25
ggagcgattt gtctggtt
                                                                     18
<210> 26
<211> 18
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide PCR primer
<400> 26
```

tgatgactcg cgcttact 18 <210> 27 <211> 264 <212> DNA <213> Artificial sequence <220> <223> transit peptide encoding sequence atggetteet etatgetete tteegetaet atggttgeet eteeggetea ggeeactatg 60 gtcgctcctt tcaacggact taagtcctcc gctgccttcc cagccacccg caaggctaac 120 aacgacatta cttccatcac aagcaacggc ggaagagtta actgcatgca ggtgtggcct 180 ccgattggaa agaagaagtt tgagactctc tcttaccttc ctgaccttac cgattccggt 240 ggtcgcgtca actgcatgca ggcc 264 <210> 28 <211> 88 <212> PRT <213> Artificial sequence <223> transit peptide sequence <400> 28 Met Ala Ser Ser Met Leu Ser Ser Ala Thr Met Val Ala Ser Pro Ala 5 Gln Ala Thr Met Val Ala Pro Phe Asn Gly Leu Lys Ser Ser Ala Ala Phe Pro Ala Thr Arg Lys Ala Asn Asn Asp Ile Thr Ser Ile Thr Ser Asn Gly Gly Arg Val Asn Cys Met Gln Val Trp Pro Pro Ile Gly Lys Lys Lys Phe Glu Thr Leu Ser Tyr Leu Pro Asp Leu Thr Asp Ser Gly 75 Gly Arg Val Asn Cys Met Gln Ala 85

<210> 29 <211> 174

<212> DNA

	01 220
<213> Artificial sequence	
<220> <223> transit peptide encoding sequence	
<400> 29	
atggetteet etatgetete tteegetaet atggttgeet eteeggetea ggeeactatg	60
gtcgctcctt tcaacggact taagtcctcc gctgccttcc cagccacccg caaggctaac	120
aacgacatta cttccatcac aagcaacggc ggaagagtta actgcatgca ggcc	174
<210> 30 <211> 58 <212> PRT <213> Artificial sequence <220> <223> transit peptide sequence	
<400> 30	
Met Ala Ser Ser Met Leu Ser Ser Ala Thr Met Val Ala Ser Pro Ala 1 5 10 15	
Gln Ala Thr Met Val Ala Pro Phe Asn Gly Leu Lys Ser Ser Ala Ala 20 25 30	
Phe Pro Ala Thr Arg Lys Ala Asn Asn Asp Ile Thr Ser Ile Thr Ser 35 40 45	
Asn Gly Gly Arg Val Asn Cys Met Gln Ala 50 55	
<210> 31 <211> 294 <212> DNA <213> Arabidopsis thaliana	
<400> 31	
tcatttctca tcataacaaa gagagagaaa aaaactatgg aattgacact gaattcctcg	60
agttototta toaaacgtaa agatgocaag agttotagaa accaagaaag ttootocaac	120
aacatgacct ttgcgaagat gaagccgcca acatatcagt tccaagcaaa gaactcggtt	180
aaggaaatga agttcactca cgagaagacc ttcacgccag aaggtgaaac ccttgagaaa	240
tgggagaagc tecaegttet etcataeeca caetecaaga aegaegetag egtt	294
~210 > 32	

<211> 86

<212> PRT

<213> Arabidopsis thaliana

<400> 32

Met Glu Leu Thr Leu Asn Ser Ser Ser Ser Leu Ile Lys Arg Lys Asp 1 5 10 15

Ala Lys Ser Ser Arg Asn Gln Glu Ser Ser Ser Asn Asn Met Thr Phe
20 25 30

Ala Lys Met Lys Pro Pro Thr Tyr Gln Phe Gln Ala Lys Asn Ser Val 35 40 45

Lys Glu Met Lys Phe Thr His Glu Lys Thr Phe Thr Pro Glu Gly Glu 50 60

Thr Leu Glu Lys Trp Glu Lys Leu His Val Leu Ser Tyr Pro His Ser 65 70 75 80

Lys Asn Asp Ala Ser Val 85